



Achieving the Dream

Achieving the Dream is a multiyear national initiative to help more community college students succeed. The initiative is particularly concerned about student groups that traditionally have faced significant barriers to success, including students of color and low-income students. The initiative aims to help participating colleges identify at-risk student groups in their student populations and then design and implement intervention strategies that will increase the success of these at-risk groups.

Developmental Education: Completion Status and Outcomes

Developmental education programs are designed to provide assistance to students who are academically under-prepared for college-level coursework. Nationally, 42 percent of first-year students at community colleges enroll in at least one developmental course.¹ Research in Texas indicated that 25 to 50 percent of those taking remedial courses fail to complete them²; further research in Ohio community colleges indicated that students seeking two-year degrees referred to developmental math were less likely to graduate than those not referred.³ A study completed by the Florida Department of Education revealed that of students who failed to complete their developmental coursework, only 15 percent remained in college within two years, less than 1 percent earned vocational or career certificates, and none finished with associate degrees within 2 years.⁴ On the other hand, students successfully completing developmental courses appeared to be as successful as their non-developmental education counterparts.⁵

Previous issues of Data Notes compared the outcomes of developmental students completing all of their required developmental courses to those not requiring developmental education. But a void exists in terms of outcomes for those who partially complete their developmental requirements. This analysis examines outcomes of four different groups of students organized by their developmental needs and completion statuses: students referred to developmental education and completing (1) all, (2) part, or (3) none of their developmental education requirements during the first academic year⁶,

and (4) those not referred.⁷ Some colleges refer students to different levels of developmental courses, while others simply refer students by subject: eleven of the Achieving the Dream colleges' developmental education programs do not have multiple levels, while the balance do refer students to various levels. As such, separate analyses were conducted for colleges with multiple levels of developmental education, and those with only one level.

The results suggest that getting students who need remediation to enroll in the appropriate classes immediately, and doing everything possible to help them succeed will result in improved completion rates. The results also show that different measures of student success—persistence, credits completed, and GPA—can provide conflicting evidence.

Developmental Education Referrals and Completions

Regardless of whether they enrolled institutions with single or multiple developmental levels, 60 percent of Achieving the Dream community college students were referred to developmental education. This could be one or more subjects, and for colleges with multiple levels, one or more levels.

Overall, during the first academic year, 15 percent of students fulfilled all of their developmental education requirements, with another 40 percent partially fulfilling their developmental education (figure 1). Forty-six percent of students did not complete any of the developmental education requirements.

Differences existed in developmental coursework completion patterns for students in

(continued on next page)

¹ Parsad, B. & Lewis, L. *Remedial Education at Degree-Granting Postsecondary Institutions in Fall 2000*, NCES 2004-010. Washington, DC: U.S. Department of Education, National Center for Education Statistics (2003). <http://nces.ed.gov/pubns/2004/2004010.pdf>

² Boylan, H., & Saxon, P. *An Evaluation of Developmental Education in Texas Colleges and Universities*. Austin, TX: Texas Higher Education Coordinating Board (1998).

³ Bettinger, E. P. & Long, B. T. "Remediation at the Community College: Student Participation and Outcomes," *New Directions for Community Colleges*, Report no. 129 (2005) 17-26. <http://mutex.gmu.edu:2155/cgi-bin/fulltext/110433439/PDFSTART?CRETRY=1&SRETRY=0>

⁴ Florida Department of Education, Office of Program Policy Analysis and Government Accountability. *Half of College Students Needing Remediation Drop Out; Remediation Completers Do Almost as Well as Other Students*, Report no. 07-31 (May 2007). <http://www.oppaga.state.fl.us/reports/pdf/0731rpt.pdf>

⁵ Illich, P., Hagan, C. & McCallister, L. "Performance in College-Level Courses Among Students Concurrently Enrolled in Remedial Courses: Policy Implications," *Community College Journal of Research and Practice* 28, no. 5 (2004) 435-453. <http://dx.doi.org/10.1080/10668920490444463>.

⁶ According to the U.S. Department of Education, on average, students enrolling in developmental courses devote less than a year to these classes.

⁷ Colleges indicate on their Achieving the Dream data submissions whether they have referred a student to developmental education, and to what level the student was referred. College referrals may be based on placement or achievement tests, high school grades, or previous college experience.

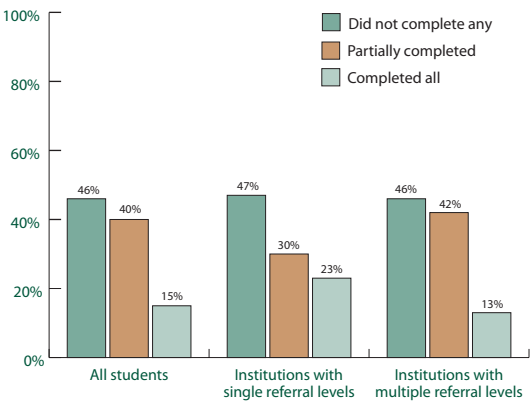
What Is a Cohort?

A *cohort* is a group of people studied over time. The individuals in the group have at least one statistical factor — such as when they started college — in common.

The Achieving the Dream 2002 student cohort, for example, is the group of credential-seeking students that attended Achieving the Dream institutions for the first time in fall 2002.

Tracking a cohort over time makes it possible to compare the progress and outcomes of different groups of students (e.g., groups defined by race, age or other demographic characteristics) and to determine if there are gaps in achievement among groups of interest.

Figure 1. Percentage of Achieving the Dream students referred to developmental education by completion status of developmental requirements during the first academic year



colleges with single levels compared with those in institutions with multiple levels. Thirteen percent of students in colleges with multiple levels completed all of their developmental education requirements compared with 23 percent of those enrolled in colleges with a single referral level. However, 42 percent of students in colleges with multiple referral levels partially completed, compared with 30 percent in colleges with a single level. Thus, combining the partial and full completers results in 46 percent of students in institutions with single and 47 percent of those in multiple levels failing to complete any of their developmental education requirements.

Persistence

Students who completed all of their developmental education requirements by the end of the first

year were the most likely to persist: 94 percent persisted to the second term, and 80 percent to the second year (figure 2). This finding is consistent with past findings from Achieving the Dream analyses.⁸

Of particular note is that students partially completing their developmental education requirements by the end of the first year were more likely to persist both to the second term and the second year than those who did not complete any required developmental education, and those who were not referred. This is the case for students in colleges with multiple or single levels of developmental education referrals.

Credits and GPA

Students fully completing their developmental requirements during the first academic year also completed 36 credits by the end of the second year, compared with 30 credits completed by those who partially completed the developmental sequence and 23 credits for those that did not complete any requirements (figure 3).⁹ Those who were not referred completed 26 credits by the end of the second year.

The same general results held when students attending colleges with single or multiple levels of developmental education were analyzed separately; however, students in institutions with multiple levels of developmental education earned 38 credits if they finished all their developmental education requirements, compared with 31 credits by students in institutions with single levels. It is noteworthy that students

Figure 2. Percentage of Achieving the Dream students persisting by developmental education status the end of the first year¹

| | Percentage persisting to... | |
|---|-----------------------------|-------------|
| | Second term | Second year |
| All students | 70 | 57 |
| Referred | 74 | 59 |
| Did not complete any developmental education | 57 | 45 |
| Partially completed developmental education | 85 | 65 |
| Completed all developmental education | 94 | 80 |
| Not referred | 66 | 54 |
| Institutions with single levels, all students | 76 | 59 |
| Referred | 79 | 61 |
| Did not complete any developmental education | 67 | 52 |
| Partially completed developmental education | 83 | 59 |
| Completed all developmental education | 94 | 78 |
| Not referred | 71 | 57 |
| Institutions with multiple levels, all students | 69 | 56 |
| Referred | 73 | 58 |
| Did not complete any developmental education | 55 | 44 |
| Partially completed developmental education | 85 | 66 |
| Completed all developmental education | 93 | 80 |
| Not referred | 65 | 54 |

¹Persistors include those who are enrolled, transferred or attained credentials.
NOTE: This analysis uses data from Rounds 1 and 2 planning year cohorts (2004 and 2005, respectively), and Rounds 3 and 4 baseline (2005) cohort.

⁸ Clery, S. “Developmental Education,” *Data Notes: Keeping Informed about Achieving the Dream Data* 1, no. 6 (July/August 2006). http://www.achievingthedream.org/_pdfs/DataNotes/DataNotes-JulAug-2006.pdf
⁹ This includes only students persisting to the second academic year.

Figure 3. Number and percentage of credits completed, and average GPA for Achieving the Dream students persisting¹ to the second year by developmental education status by the end of the first year

| | Credits | | Average GPA |
|---|------------------|-------------------|-------------|
| | Number completed | Percent completed | |
| All students | 28 | 77 | 2.59 |
| Referred | 29 | 75 | 2.48 |
| Did not complete any developmental education | 23 | 71 | 2.42 |
| Partially completed developmental education | 30 | 74 | 2.41 |
| Completed all developmental education | 36 | 80 | 2.73 |
| Not referred | 26 | 81 | 2.80 |
| Institutions with single levels, all students | 25 | 67 | 2.55 |
| Referred | 25 | 62 | 2.44 |
| Did not complete any developmental education | 22 | 64 | 2.39 |
| Partially completed developmental education | 22 | 54 | 2.29 |
| Completed all developmental education | 31 | 68 | 2.65 |
| Not referred | 25 | 77 | 2.74 |
| Institutions with multiple levels, all students | 28 | 79 | 2.60 |
| Referred | 30 | 77 | 2.49 |
| Did not complete any developmental education | 23 | 72 | 2.42 |
| Partially completed developmental education | 31 | 77 | 2.42 |
| Completed all developmental education | 38 | 85 | 2.78 |
| Not referred | 26 | 82 | 2.81 |

¹Persistors include those who are enrolled, transferred or attained credentials.

NOTE: This analysis uses data from Rounds 1 and 2 planning year cohorts (2004 and 2005, respectively), and Rounds 3 and 4 baseline (2005) cohort.

who attended institutions with single levels of developmental education and partially completed their requirements earned 22 credits compared with 25 credits for those who were not referred. However, in institutions with multiple levels, the reverse was true, with students completing partial requirements earning 31 credits, compared with 26 credits earned by those not referred.

Overall, students not referred to developmental education completed the largest portion of credits they attempted, followed by students completing all of their requirements and those completing partial requirements: 81, 80 and 74 percent, respectively. Students who attended institutions with multiple levels and fully completed their developmental education requirements completed 85 percent of credits attempted compared with 82 percent of those in single level colleges. It is again noteworthy that of those referred, students who partially completed their requirements finished a larger average percentage of attempted credits than those not completing any developmental education: 77 compared with 72 percent. In institutions with single levels of developmental education, students partially completing their developmental education requirements completed the lowest percentage of credits attempted—54 percent.

Students' GPA patterns show some unanticipated results. Students who partially completed their developmental education requirements earned GPAs either equivalent to or lower than students who did not complete any developmental education requirements. In a more expected outcome,

students not referred to developmental education and those completing all requirements earned the highest average GPAs.

Further research needs to be conducted in order to determine why those who completed some developmental education courses had lower GPAs and smaller percentages of credits completed than those who did not complete any developmental education. This finding suggests that students not completing any developmental education may have enrolled in courses that did not require the same level of mathematical or reading comprehension, and would therefore be likely to complete more of these credits and obtain higher GPAs. On the other hand, students who have partially completed their developmental education may have begun enrolling in more challenging courses, but be struggling, thus completing fewer credits with lower GPAs.

What Does it Mean?

With the exception of GPA, students who partially completed their developmental education requirements during the first year attained better outcome measures than those who did not complete any, yet they were not as successful on the studied outcome measures as those who completed all of their developmental education requirements. Further, persistence rates for partial completers were higher when compared with those not referred, and in some cases, partial completers obtained more credits by the end of the second year.

The relatively low success rates for students with developmental needs who do not complete their developmental coursework, coupled with the fact that nearly 50 percent do not complete any requirements by the end of the first year, suggests an important avenue for improving student outcomes. The increased success for students making progress in completing their developmental courses indicates the importance of getting students to enroll in the developmental courses they need, and helping them succeed in these classes.

It may be worth examining differences between students as they progress through their developmental education programs, especially for students completing some of the requirements compared with those completing none, as it is likely they have different needs. The research suggests the following questions for Achieving the Dream institutions:

- Do persistence rates of students at your college vary by referral to, and success in, developmental education?
- Does a relationship exist between full or partial completion of developmental education and student persistence?
- How do students who do not complete all developmental education, but persist, differ from those who do not complete their developmental education requirements and leave the college?
- Do students who partially complete their developmental requirements during the first year struggle with these and other classes, causing lower GPAs and incomplete credits? What programs can be developed to help these students?
- What other characteristics of students enrolled in developmental education may be related to persistence? Try disaggregating your data by age, gender, race/ethnicity, Pell status, or enrollment status to identify these relationships.
- What programs does your institution have in place to provide special help to students enrolled in developmental education?

Data Notes is a bimonthly publication that examines data to illuminate the challenges facing Achieving the Dream colleges and to chart their progress over time.

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If you have questions regarding this issue, or if there is a topic you would like to see addressed in *Data Notes*, please contact Sue Clery at sclery@jblassoc.com.

This report uses the April 2008 version of the Achieving the Dream database. Colleges are identified by the year they started work with the initiative.